REMARKS

This amendment responds to the Final Office Action mailed January 24, 2007. In the Final Office Action, the Examiner:

- rejected claim 9 as being indefinite under 35 U.S.C. § 112, second paragraph;
- rejected claims 4, 51, 54-62, and 64-66 under 35 U.S.C. § 102(e) as being anticipated by Stewart (US 6,535,610);
- rejected claims 2, 3 and 7 under 35 U.S.C. § 103(a) as being unpatentable over Minami et al. (US 5,555,310) in view of well-known prior art; and
- rejected claims 5, 6, 8-10, 50, 52, 53, and 63 under 35 U.S.C. § 103(a) as being unpatentable over Minami et al. in view of well-known prior art and further in view of Marash (US 6,483,923).

After entry of this amendment, claims 2-3, 5-7, 57, 63, and 67-79 are pending.

As an initial matter, Applicant respectfully notes that the Examiner failed to consider previously submitted claims 61-66. Because of this amendment, however, previously submitted claims 61-62 and 64-66 have been canceled. Accordingly, only previously submitted claim 63 has not been considered. Claim 63 is dependent on independent claim 2. Thus, the ground for rejection of claim 2 is assumed to apply to claim 63 and will be addressed below.

Overview of Changes to the Claims

Claims 4, 8-10, 50-56, and 58-66 have been canceled. Claims 2, 3, 6, 7 and 63 have been amended to correct typographical errors and to clarify the scope of the claim. Claim 57 has been amended to depend from independent claim 2 and to clarify the scope of the claim. New claims 67-79 have been added. New independent claims 68 and 72 are based on independent claim 2. Support for the new claims is found at least in Figures 5-9, the corresponding text in the specification and the originally filed claims. These changes, therefore, do not constitute new matter.

Claim Rejections Under 35 USC § 112

The Examiner has rejected claim 9 as being indefinite. In light of the cancellation of claim 9, this rejection is moot. Accordingly, removal of this ground for rejection is respectfully requested.

Claim Rejections Under 35 USC § 102(e)

In the present office action, the Examiner has rejected claims 4, 51, 54-62, and 64-66 as being anticipated by Stewart. In light of the cancellation of claims 4, 51-56, and 61-62 and the amendments to claims 57-58, this rejection is moot. Removal of this ground for rejection is respectfully requested.

Claim Rejections Under 35 USC § 103(a)

In the present office action, the Examiner has rejected claims 2, 3, and 7 as being unpatentable over Minami et al. in view of well-known prior art. The Applicant respectfully disagrees and traverses.

As noted above, new independent claims 68 and 72 are based on independent claim 2. Thus, the ground for rejection of independent claim 2 is assumed to apply to new independent claims 68 and 72 and will be addressed accordingly.

As the Examiner is aware, to establish a prima facie case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations.[1]

In the present office action, the Examiner states that Minami et al. discloses

> a device with a plurality of microphones configured to selectively operate to perform adaptive acoustic stereo echo-canceling operations on audio signals captured by at least some of the associate microphones to produce a stereo-echo-canceling audio signal.[2] (citations omitted)

The Examiner further states

[1] MPEP § 2143

[2] Office Action mailed January 24, 2007, page 5.

> Minami teaches the use of a multimedia terminal to operate as outlined above, but Minami does not teach selectively operating to perform the echo-canceling operations. Personal computers are well-known in the art at the time of the invention, and the Office takes Official Notice that a personal computer (PC) could be used as a multimedia terminal. It would be obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Minami and the well-known prior art for the purpose of enabling the multimedia player to play a larger array of media. It would be inherent that a PC would be configured to selectively operate the echo-canceling operations, as taught by Minami, because in certain situations the microphone input is not needed (e.g. while listening to a compact audio disc.[3] (citations omitted)

The Examiner, however, does not reference synthetic aperture microphone processing as required by independent claims 2, 68 and 72. Accordingly, pending claims 2-3, 5-7, 57, 63, and 67-79 are each patentable over Minami et al. in view of a personal computer for at least this reason. Removal of this ground for rejection is respectfully requested.

In anticipation of an attempt to combine Minami et al. and Stewart in a subsequent Office Action, Applicant preemptively disagrees and traverses. A prima facie case of obviousness based Minami et al. and Stewart cannot be established because there is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine Minami et al. with Stewart.

It is well established that a prima facie case of obviousness requires at least some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.[4] The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure.[5] Further, a mere force fit of incompatible references runs afoul of the well established rules that "any proposed modification cannot render the prior art unsatisfactory for its

---

[3] Office Action mailed January 24, 2007, page 5.

[4] MPEP § 2143

[5] *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

intended purpose"[6] and that "any proposed modification cannot change the principle of operation of a reference."[7]

The Examiner may wish to look to Minami et al. to support adaptive acoustic stereo echo-canceling and to Stewart to support synthetic aperture microphone processing. But, in doing so, the Examiner would be suggesting a combination of features from two totally unrelated and incompatible pieces of prior art. This is impermissible in obviousness rejections.

Minami et al. is unrelated to and incompatible with Stewart for four reasons: Minami et al. (1) is a stereo voice transmission apparatus that processes all sound signals received and includes two output channels; (2) transmits and reconstructs a spatial sound field; (3) is a conference system for use in a closed environment that produces echoed sound signals; and (4) addresses the problem of echoing and howling of audio signals from the conference system itself.

In contrast, Stewart (1) is a signal processing unit that processes sound signals only from a specific sound direction and includes only one output channel; (2) collapses a spatial sound field; (3) is a conference system that enhances privacy of audio communications in an open office environment; and (4) addresses the problem of audio signals from extraneous sound sources.

As the above differences illustrate, Minami et al. and Stewart disclose mutually exclusive apparatus and address two distinct problems. Accordingly, there cannot be any suggestion, and in fact, there is no suggestion in either Minami et al. or Stewart that it would be desirable to combine them.

Without such suggestion, any obviousness argument runs afoul of the rule, that "the prior art must suggest the desirability of the claimed invention" and that "[o]bviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly

---

[6] MPEP 2143.01 paragraph V. "If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification."

[7] MPEP 2143.01 paragraph VI. "If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.

or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art."[8]

Thus, Applicants strongly submit that the Examiner would not be able to demonstrate how or why someone using Minami et al.'s echo-canceller would look to a synthetic aperture microphone to solve a problem that is not even identified by Minami et al.

Moreover, it is well established that the mere "fact that references can be combined or modified is not sufficient to establish prima facie obviousness"[9] and that the mere "fact that the claimed invention is within the capabilities of one of ordinary skill in the art is not sufficient by itself to establish prima facie obviousness."[10]

Therefore, there are several reasons that there can be no motivation to combine the teachings of Minami et al. and Stewart. Such an attempt to combine would begin with hindsight, take bits and pieces of incompatible references, and merge these incompletely in a direction contrary to the express teachings of the applications of the references.

In light of the above, pending claims 2-3, 5-7, 57, 63, and 67-79 would each be patentable over Minami et al. in view of Stewart and further in view of a personal computer for at least these reasons.

The Examiner has also rejected claims 5, 6, 8-10, 50, 52, 53, and 63 as being unpatentable over Minami et al. in view of well-known prior art and further in view of Marash. The Applicant respectfully disagrees and traverses.

As stated above, claims 50, 52 and 53 have been canceled. Claims 5, 6, 8-10 and 63 depend from independent claim 2. Accordingly, claims 5, 6, 8-10 and 63 are patentable over Minami et al. in view of well-known prior art and further in view of Marash for at least the same reasons as independent claim 2, and for the additional limitations called for therein. Removal of this ground for rejection is respectfully requested.

---

[8] MPEP § 2143.01 paragraph I.

[9] MPEP 2143.01, paragraph III. "The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990)."

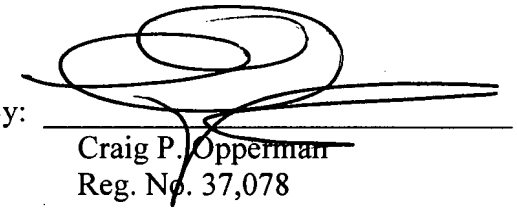
[10] MPEP 2143.01, paragraph IV.

CONCLUSION

In light of the above amendments and remarks, the Applicant respectfully requests that the Examiner reconsider this application with a view towards allowance. The Examiner is invited to call the undersigned attorney at (650) 843-4000, if a telephone call could help resolve any remaining items.

Respectfully submitted,

MORGAN, LEWIS & BOCKIUS LLP



By: _____
Craig P. Opperman
Reg. No. 37,078

Dated: April 23, 2007

Customer No.: 24341
MORGAN, LEWIS & BOCKIUS LLP
3000 El Camino Real, Suite 700
Palo Alto, CA 94306
Phone: 650-843-4000